

Prairie Update

VOLUME 17

FALL 2003



Hello Voluntary Stewards!

It's been a busy summer, but an early harvest has meant things are slowing down in most areas of the province. We hope you'll have time to relax and enjoy this edition of the *Prairie Update*.

In this issue, we are focusing on watershed health and the importance of both upland and riparian area management. The area featured is the Pipestone Creek. Unlike some regions, where watershed groups are well established, stakeholders in the Pipestone Watershed are learning more about what they can do together. Through a growing interest in the Prairie Stewardship Program, several new demonstration projects have been started in the area as well.

As you know, we have traditionally included information on native plants and bird species. To complement our watershed article, we are including a profile of aquatic life. This profile is taken from a guide we recently published, titled "Fish Species of Saskatchewan."

Once again, we were pleased to meet many of you over the summer through Range Management Field Days and Livestock Watering Workshops. Some of the communities we visited include Landis, Rosthern, Broadview, Redvers, Kindersley, Churchbridge, Meacham and Lake Alma.

For those of you who were unable to attend, we hope to see you next year. In the meantime, to give you a sample of the ideas that were shared, we have included comments from producers who participated.

Rounding out our newsletter, we have included information about our new website and four new publications about riparian management. We encourage you to check them out.

If you're in Regina for the Canadian Western Agribition in Regina this November, we hope you'll stop by our booth to say "Hello!"

Jennifer Lohmeyer
and Tracy Harrison

Producers Strive to Improve Watershed Health

By Tracy Harrison



Kneeling on a south-facing slope of the Pipestone Valley, Wes Kemp plucks a tall, red stemmed grass and holds it up. With a turkey foot shaped seed head consisting of four spikes, "Big Bluestem" is a dominant species in the tall grass prairie region.

But it's also a dominant part of keeping the Pipestone Watershed healthy.

Since Pipestone Creek is affected by the condition of upland areas, Kemp's assessment of the surrounding native, tame and bush pastures will serve as a useful management tool in the future.

And it's a tool that he will be able to use himself.

While he is neither a range agrologist or biologist, Kemp has learned the basics about plant identification and assessment - simply because he wants to be a good steward of the land.

"The reason we want to protect everything is for our youth. We want them to enjoy this when we're all gone," said Kemp, who grew up in the area and has a farm of his own.

Located southwest of Broadview, Saskatchewan, Kemp's operation includes 1,800 acres of both rented and owned land which borders the Pipestone Valley. He runs a 120 head cow-calf herd and backgrounds calves which he buys in the fall.

Inset: Wes Kemp

Below: Etienne Soulodre of the Saskatchewan Watershed Authority discusses range condition with Whitewood cattle producer Ludger Poncelier, who implemented a riparian grazing system in 2001.



*Photos by
Tracy Harrison*



Like Kemp, there are many livestock producers who value the native range in the hills of the Pipestone. But they aren't the only ones.

Pipestone Creek, with its headwaters south of Grenfell, flows downstream to Moosomin Lake, which is a popular fishing and recreation area. Deep wells next to the lake provide water for the town of Moosomin. Eventually, Pipestone Creek flows to Oak Lake Manitoba, with other communities drawing from it along the way.

Kemp's concern about the watershed has led him to represent the RM of Kingsley as a member of a new watershed group, which formed during a meeting in Kipling, in the spring of 2003. It was here that Kemp became aware of the opportunity to learn more about pasture management.

Etienne Soulodre, of the Saskatchewan Watershed Authority in Regina, made a presentation about extension work being done through its Prairie Stewardship Program. Certain this information would be of interest to area producers, Kemp offered to help organize a one day "range school" if Soulodre would come back to lead it.

In mid-August, with assistance from Tom Harrison, also of the Watershed Authority,

and support from Ducks Unlimited Canada, Soulodre spent a day in the field with area producers. However, the workshop attracted a wider variety of participants, including a school teacher from the Regina Public School Board and local "wild crafters" who harvest native seed.

Soulodre said, "We teach them the technical assessments that an agrologist would do. Not that they're necessarily going to do the technical assessments - but it trains their eye to the things they see all the time. It's simple

things like giving names to the plants they've seen their whole life and maybe giving them a little more information about the significance or the value of what that plant is."

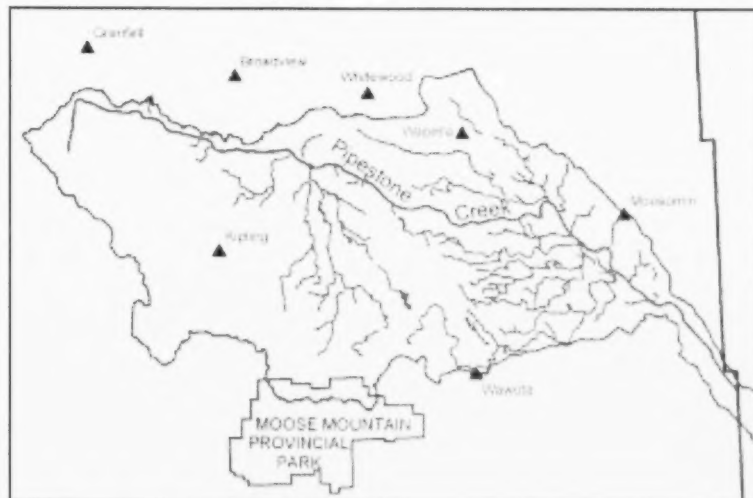
For instance, since sediment from soil erosion on the uplands is a potential contaminant of water quality - the deep binding root systems of native plants play an important role in the health of the entire watershed. Unlike a cultivated field scarred with washouts and gullies, or an over-grazed pasture streaked with "runs and rills," native range in healthy condition will reduce the amount of erosion that occurs during heavy rainfall or a flood.

In the riparian areas below, native vegetation, which often includes woody species, is also important for stabilizing streambanks and filtering contaminants from runoff. When a riparian area is healthy, it can recharge groundwater reserves by storing and releasing water much like a sponge.

In the big picture, a healthy watershed benefits an ecosystem - and the local economy.

While riparian areas only make up a small percentage of the Prairie landscape, these lush ribbons of green provide habitat for

Pipestone Watershed



approximately 75 per cent of wildlife species. Aquatic life, for example, benefits from cooler water and increased oxygen when overhanging plants provide shade.

For livestock producers, a healthy riparian area with its abundant vegetation and positive impacts on water quality, has the potential to improve livestock production.

For Kemp, that's reason enough to learn everything he can.

"If we don't know anything about our grass, it's pretty hard to protect it or try to get more production out of it. If you're going to raise beef, you need grass - and if you don't look after it, you don't make as much money," he said, adding the Watershed Authority's range agrologists helped him put everything into perspective.

"It was very interesting. They were excellent guys to work with. They're knowledgeable and a definite asset to the province for putting these workshops on," said Kemp. "It's hard to stump them on any questions because they've been around, walked the valleys and walked different pastures in the province. It seems they know what they're talking about."

As for the beauty of the Pipestone Valley - Kemp knows what he's talking about.

"I'm not a nature nut but I enjoy hiking and being outdoors. As long as we keep our native prairie in good condition we'll have nesting grounds and habitat for wildlife. And if we keep our creek clean and the water going into it clean, everybody downstream can enjoy the water for canoeing or sportfishing or whatever. But in the end, a lot of people will benefit from it."



Glen and Dawn Ekert of Wapella, along with three neighboring ranch families, formed a holistic grazing management club in the Pipestone Valley.



Water monitoring in this region is being done by Al Ferguson, Eileen Godon and Norm Schmidt who are cottage owners at Moosomin Lake, south of Moosomin.

Since the mid 90s, the Prairie Stewardship Program, developed by the former Saskatchewan Wetland Conservation Corporation, has provided technical and financial assistance for landowner demonstration projects.

It has also provided training for educators, school children, community groups and cottage owners interested in water quality monitoring. In this watershed, a volunteer group has already been monitoring at Moosomin Lake for several years.

Etienne Soulodre, who has taught range and riparian (streambank) assessment courses for government agencies and conservation groups, said the demand for training is growing at the "grassroots" level. While landowners appreciate assistance with setting up grazing systems and remote watering sites for their cattle - they want to know more about "what works and why."

"Producers want to learn the more technical "reading the land" kind of skills. They live in this beautiful place in the valley and they want to keep it that way.

"By giving themselves the tools to better manage their land and water resources, not

only are they maintaining the sustainability of their own production systems - they are learning things that are going to make them fundamentally the stewards of these resources for everyone.

"For example, we've been doing work with producers on the Pipestone as far back as south of Whitewood - and jackfish were migrating to spawn all the way back there. That's probably 25 to 30 miles back from Moosomin Lake. So these guys are not only growing cattle - they're growing fish. And they recognize the value of that."

Prairie Stewardship in Pipestone Valley



Partnership Grows Out of Park Management Initiative

and partnering on land use issues. The park, which encompasses 405 square kilometres of upland boreal forest, is utilized for oil and gas exploration and development, grazing, haying, hunting, trapping, forest harvesting, camping and numerous recreational activities.

Livestock grazing, "formally" started in the '30s, was of special interest since two-thirds of the park (approx. 335 square kilometres) comprises one large field. With a May 15 to October 15 grazing season, the carrying capacity is set at 1600 cows.

In drafting a forest renewal plan, staff are considering the needs of 44 cattle producers. While possible management tools include

grazing, fire, forest harvest, haying and chemical application like spraying, interactions between these tools are important.

For example, grazing management after harvest can be used to manipulate forest renewal. Chemical applications, however, can impact organic livestock producers who need written guarantees to maintain their status.

Through future consultations and range extension work, agency partners hope to improve management for the benefit of producers, stakeholders, water quality, wildlife habitat and biodiversity.

By sharing their resources, the Saskatchewan Watershed Authority and Saskatchewan Environment hope to meet common objectives "in the field." While the Authority is doing extension work with landowners along Pipestone Creek, Saskatchewan Environment is doing related work on the edge of the watershed, in Moose Mountain Provincial Park.

During a park tour in August, agency staff compared notes on riparian, forest and range health and took steps towards sharing data

Northern Pike (*Esox lucius*)

Distinguishing features

- Large, tooth-filled mouth
- Dorsal fin positioned close to caudal fin

Description Generally, pike are green to brown in overall colour with milky-white bellies. Their flanks have white, bean-shaped spots extending from the gill cover to the base of the caudal fin. The large head of this fish is filled with numerous razor-sharp teeth. It is not uncommon for pike in Saskatchewan to attain lengths in excess of 100 cm and weigh over 9 kg.

Habitat This native gamefish is found throughout the province and usually in abundant numbers. Ideally, pike prefer large, slow-moving, heavily



vegetated rivers or the warm, weedy bays of lakes. Pike are generally found within the top five meters of a waterbody, especially in the spring and fall. During summer, pike will seek out cooler, deeper waters.

Spawning Pike spawn early in April during the first signs of spring break-up. Their sticky eggs are broadcast in small numbers over flooded grasses or submerged vegetation upon which they remain and incubate.

Feeding Besides different forage or gamefish, pike will also consume aquatic invertebrates such as leeches, crayfish or freshwater shrimp. Small birds and mammals such as mice, muskrats and ducklings have also been known to frequent the diet of pike. Although fish dominate their diet, pike will eat anything they can fit into their mouths.

The Latin name for pike translates as "water wolf," a fitting name for a fish who often stalks and ambushes its prey.

Producers Share Livestock Watering Ideas

Unlike the early days when homesteaders simply staked out a farm near a creek or spring or ranchers trailed their cattle to a river - today's producers are paying more attention to providing clean water for their livestock.

Along with using solar panels, windmills, gravity fed pipelines and wet wells to access water from dugouts, springs and flowing water, producers are making use of outside resources to develop watering sites and have their water tested.

But in many cases - those outside resources are close to home.

Through field days and workshops, producers have "started discussions" that continued long after the day was done.

Gladmar livestock producer Mark Hoinmyr, who is the fourth generation to farm in the area, said information from a tour he attended this past summer will be helpful for his family operation.

"The best way to figure out the way you want to get a project done on your land is to look at everybody else's ideas and mistakes - and things they've done right," said Hoinmyr.

"That was part of the reason I was interested in coming. We've got some areas that do need to be developed. We're trying to come up with the best tactic that's the most economically feasible."

"And on half of these things, you don't learn as much from what you go to look at as you do from just talking to the people that come to see them. The people that come to these things aren't the people that are stuck in ruts. They're the people that are

trying new things and experimenting. It's a good place to learn a lot even if it's not exactly what the tour is about. You end up learning a lot about everything."

Along with listening to producer experiences, Hoinmyr said he enjoyed the information on surface geology provided by the Watershed Authority's groundwater specialists as well as technical information from suppliers of livestock watering systems, including Dutch Industries, CAP Solar and Kelln Solar.

"I thought that was a pretty good idea too. It was a good combination of being able to actually see the pumps and the systems in their practical applications where they were working and then having the representatives and suppliers right there able to explain how everything works, why it works and things that have been done to make improvements over the years."

Dear Tracy and Jennifer,

I have been to one of your seminars and enjoyed it and I also get a lot out of your newsletter. I got the idea from your seminar about piping water.

I hooked water for two years because of drought and bad water.

Then one day I looked at my neighbor's flowing well running into the ditch. I got the idea hooked and now I have readings on the well. When help from that's people we figured I had enough water to pipe the water into places of a mile to my house.

I hooked in a 2 inch line using a round pipe I hooked the well and modified the old ditch to let the water flowing in the ditch. After some years of all this piping water flowed through in the three inches I set up. I was very happy and things worked well.

I did a well running - my cattle well in the old ditch to get to the pipe water in the ditch and still keep in the ditch.

After some time I have a little more of this and some more.

Thank you for your work and your help.

Yours truly,
Mark Hoinmyr
Gladmar, Iowa



Photo by Julie Korol



Saskatchewan Watershed Authority Launches New Website

This fall, the Saskatchewan Watershed Authority launched a new website.

With information about all of our services, programs and publications, we hope it will answer any questions you may have about our role in water management.

For example, while you already know the *Prairie Stewardship Program* is delivered under a new name - did you know the Authority can help you with more than just grazing management and livestock watering site development?

Along with a program geared toward testing private rural water supplies, we also have groundwater specialists who can provide

valuable information about wells and surface geology.

But that's not all. Since watershed health is dependent on so many factors - we have a diverse pool of resources to draw upon. Our staff members range from fisheries biologists to hydrologists who work out of nine offices across the province.

Rounding out the website, we have tried to provide you with information about everything from streamflow forecasts and water control structures to watershed education programs such as *Project Wet* and the *Sturgeon Outreach Program*.

Interactive maps also highlight the site. By guiding you through watersheds and basins, our priority work areas and landowner demonstration projects, we hope to give you a better understanding about what's going on in your area.

So come and see us! We're just a "click" away at www.swa.ca.

Please note, if you have any comments or suggestions for our new site, we'd love to hear from you.



Little Bluestem

(*Schizachyrium scoparium*)

is a medium-height, warm-season bunch grass that in Saskatchewan is most often found on hillsides or prairie with high water tables or seepages. In fall and winter its reddish-brown colour makes it one of the most beautiful grasses on the prairie. Though rarely growing taller than one metre, it has a dense root system which may reach two metres deep. It is a very common grass of the tall-grass prairie found in Manitoba and the Northern United States.

Illustration from Prairie Grasses Identified and Described by Vegetative Characteristics: Agriculture and Agri-Food Canada. Reproduced with permission of the Minister of Public Works and Government Services Canada, 2004.

Rural Water Quality Advisory Program

The Saskatchewan Watershed Authority delivers the Rural Water Quality Advisory Program that has, for many years, improved the quality and safety of individual water supplies in rural Saskatchewan. The Authority samples and analyzes water from private water supplies, and advises on the health and aesthetic implications of the analysis. Thorough advice is provided on the most

cost effective water treatment process appropriate to a specific water supply. Advice is also provided on beneficial management practices proven to protect and improve raw well or surface source water. In 2002, 550 clients across rural Saskatchewan received this service, bringing the program total to 2,027 clients served since the program's inception in 1997.



Photo by Tracy Harrison

New Publications Available

The Saskatchewan Watershed Authority is pleased to announce that new resources for the management of riparian areas are now available.

Four publications, including two fact sheets and two booklets have been developed with funding from Agriculture and Agri-Food Canada through the Agricultural Environmental Stewardship Initiative (AESI).

Since 2001, AESI support for the riparian component of the Prairie Stewardship Program has included landowner demonstration projects, field days and communication activities.

Some of these projects, along with others developed through the program since 1994, have been highlighted in the new publications.

While these publications were compiled by Etienne Souloire, of the Watershed Authority's Stewardship Division, we would like to acknowledge that many partnerships were forged in producing them.

Economics of Riparian Grazing Management

Can a cattle operation with all the challenges of today afford to pay special attention to the management of riparian areas? The short answer is yes. This fact sheet defines riparian grazing management and implementation; impact on pasture economics; and environmental economics of riparian areas. Five case studies have been included.

Health of Riparian Areas in Saskatchewan

Since 1996, the Saskatchewan Watershed Authority has conducted 846 lotic (flowing water) and 544 lentic (still water) riparian area assessments. This fact sheet describes the percentage of areas that were classified as "healthy," "healthy with problems" or "unhealthy." A description of riparian area functions is followed by an outline of problems that were found.

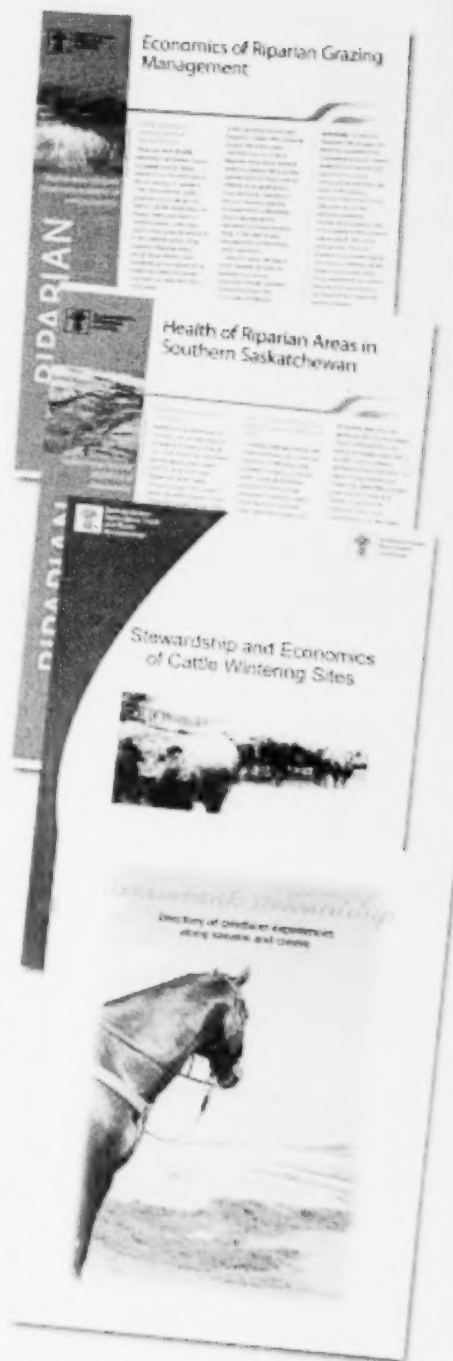
Stewardship and Economics of Cattle Wintering Sites

Cattle wintering sites can be managed to meet production goals and protect water resources through the adoption of common sense practices that reduce runoff and maintain healthy riparian areas. This booklet, produced in partnership with Saskatchewan Agriculture, Food and Rural Revitalization, covers topics such as surface water quality and groundwater protection; practical solutions to modifying wintering sites; manure management and regulations. Also included are eight case studies and a worksheet for evaluating a wintering site.

Streambank Stewardship: Directory of producer experiences along streams and creeks

The purpose of this directory is to provide extension agrologists, biologists, educators, producer groups and the general public access to the many landowner demonstration projects that the Saskatchewan Watershed Authority has been involved with since 1994. More than 150 landowner cooperators have agreed to have their operations used for field days, media reports and individual consultation.

To obtain a copy of any one of these publications, contact the Saskatchewan Watershed Authority in Regina at (306) 787-0726 or see the website www.swa.ca.



Coming Events

5th International FUTURE OF RURAL PEOPLES: Rural Economy, Healthy People, Environment, Rural Communities Symposium

October 19-23, 2003
Saskatoon, Sask.

This conference will be goal orientated with recommendations for science and policy. For more information visit the website: www.iaeh.usask.ca

Prairie Habitat and Wetland Management Field Day

Check www.swa.ca for dates
Cowessess First Nation

Contact Jason Puckett at 533-0267 or 786-5845.

Grazing and Livestock Watering Field Day

Check www.swa.ca for dates
Piapot First Nation

This field day will focus on erosion control, rotational grazing and off site watering.

Contact Jason Puckett at 533-0267 or 786-5845.

Pasture Planning Workshop

Check www.swa.ca for dates
Rosetown, Sask.

Contact Etienne Soulodre at 787-0661.

Livestock Watering and Winter Grazing Tour

Check www.swa.ca for dates
Central Butte, Sask.

Contact Julie Korol at 533-1041.

Endangered Species, Grazing Management and Marketing Workshop

Check www.swa.ca for dates
Manitou Sandhills

Contact Krista Connick at 778-8280.

Winter Stock Watering Tour

Check www.swa.ca for dates

This tour will take place in the southeast part of the province.

Contact Ross Macdonald at 861-9893.

Interprovincial Grazing Conference

December 3-5, 2003
Saskatoon, Sask.

For more information contact the Saskatchewan Stock Growers Association Office at 757-8523 or email ssga@sasktel.net.

Farm Update

December 11, 2003
Weyburn, Sask.

During this livestock seminar, Ross Macdonald of the Saskatchewan Watershed Authority will be making a presentation about stock watering options.

Contact Ross at 861-9893.

Land Use Management Workshop

January 2004
Craven/Lumsden, Sask.

This one day workshop will take place along the Qu'Appelle river.

Contact Jason Puckett at 533-0267 or 786-5845.

7th Prairie Conservation and Endangered Species Conference

February 26-29, 2004
Calgary, Alberta

For more information call the Prairie Conservation Action Plan office in Regina at 352-0472 or visit the website: www.pcsc.ca.

Prairie Conservation Action Plan (PCAP) Stewardship Education Events

1) **Cows, Fish, Cattle Dogs and Kids Game Show** – A game show on riparian (streambank) stewardship for Grades 4-6 students. Students learn about the value of riparian areas and how ranchers, farmers, and urban dwellers need to work cooperatively to maintain these important "green zones".

Saskatoon Fall Fair – November 12-14 with shows at 10:30 a.m. and 1:30 p.m.

Regina Agribition – November 24-28 with shows at 12:00 noon and 1:50 p.m., daily except for Thursday a.m.

2) **Owls and Cows Tour** – This Tour brings together the *Cows, Fish, Cattle Dogs and Kids Game Show* and the SK Burrowing Owl Interpretive Centre's *Owls On Tour* Program. Students learn about the riparian and native prairie habitats, species at risk, and the positive role played by the ranching industry in the conservation and management of prairie species and spaces.

The 03-04 Tour will be delivered between mid-October 2003 through March 2004 to Grade 3 – 6 students at schools roughly bounded by the communities of Lloydminster, Quill Lake and Melfort.

3) **Eco-Extravaganza (Eco-X)** – Eco-X includes the programs featured in the Owls and Cows Tour in addition to up to 5 other interactive sessions on water quality, ecosystem health and species at risk. The Eco-X 2004 will be delivered in the Swift Current area and will be offered to Grade K to 6 classes at schools in Swift Current, Gull Lake, Wymark, Shaunavon, Waldeck, Vanguard, Kincaid, and Neville. Dates are yet to be confirmed, but we plan to be in the area during late January or early February.

4) **Town Hall Meetings on Stewardship Education Programs** – These meetings feature presentations, displays and materials on local stewardship programs. Resource agency specialists will be available to answer questions related to various programs. These meetings are held in conjunction with the Eco-X and will likely be held in Swift Current, Shaunavon, Gull Lake, and Ponteix.

For more information, contact the PCAP Office at (306) 352-0472 or check out our website at www.pcsc-sk.org

Share Your Ideas . . .

Anyone with story ideas or coming events is welcome to share them with us at:

Attention: Jennifer Lohmeyer

#101 - 2022 Cornwall Street

Regina, SK. S4P 2K5

Phone: (306) 787-8707

Fax: (306) 787-0780

Email: jennifer.lohmeyer@swa.ca

Web site: www.swa.ca

Prairie Update is a publication of:



**Saskatchewan
Watershed
Authority**

The Saskatchewan Watershed Authority acknowledges the contributions of the following partners:

- Agriculture and Agri-Food Canada through the Agriculture Institute of Management in Saskatchewan, Inc., Agricultural Environmental Stewardship Initiative, Canada-Saskatchewan Agricultural Green Plan Agreement, Canadian Adaptation and Rural Development in Saskatchewan, Canadian Agricultural Rural Communities Initiative, National Soil and Water Conservation Program and Prairie Farm Rehabilitation Administration
- California Waterfowl Association
- Canada Millennium Partnership Program
- Canadian Wildlife Service and World Wildlife Fund (Endangered Species Recovery Fund)
- Department of Fisheries and Oceans Canada
- Ducks Unlimited Canada
- Environment Canada through Eco-ACTION
- Government of Canada Habitat
- Stewardship Program for Species at Risk
- National Fish and Wildlife Foundation(U.S.)
- Native Plant Society of Saskatchewan
- Nature Conservancy of Canada
- Nature Saskatchewan
- Nebraska Game and Parks Commission
- North American Wetlands Conservation Council
- Partners FOR the Saskatchewan River Basin
- Pheasants Forever, Inc. (U.S.)
- Prairie Conservation Action Plan
- Saskatchewan Agriculture and Food and Rural Revitalization
- Saskatchewan Energy
- Saskatchewan Environment through the Fish and Wildlife Development Fund
- SaskPower-Shand Greenhouse
- Sask Water
- TD - Canada Trust Friends of the Environment Foundation
- Tennessee Wildlife Resource Agency
- The Nature Conservancy (U.S.)
- Wildlife Habitat Canada
- World Wildlife Fund
- Wyoming Game and Fish Department